

Key Takeaways

- Fed officials have begun signaling smaller hikes in the near future
- The Q3 GDP print is due Thursday, along with PCE on Friday
- Volatility may return with force leading into next weeks Fed meeting

Traditional Market Commentary

The end of last week sparked some optimism as Fed officials indicated rate hikes could significantly slow down or even end after the next round of meetings. Futures are currently pricing in a 75 bp hike for the next meeting on November 2nd, with a second 75 bp hike priced in for December. The Fed will definitely have more data to consider after this week's economic releases with Q3 GDP released Thursday, and the Fed's preferred inflation metric, the personal consumption expenditure (PCE) index, with the yearly expected to rise slightly to 6.3% and the monthly to remain unchanged. US GDP is expected to rise to 2.3% after two consecutive negative quarterly readings at -1.6% and -0.6%, which traditionally meant a recession was in place. Unfortunately, investors may need to wait until April for Q1 2023 data to see where recession data actually stands. This all could be a primer for more volatility next week with the pending Fed decision and the unemployment rate Friday, not to mention the US midterm elections Tuesday, November 8th. Finally, what did cause some small feelings of contagion over the last 6 weeks, UK prime minister Liz Truss resigned and provided some relief to world markets after abrupt financial decisions caused distress that wasn't expected with the administration.

Equity markets finally moved Friday after a somewhat less eventful week as the S&P 500 rallied almost 100 points to the 3750 level. Longer term rates on the curve moved notably higher by almost 30 bp, in addition to the very front portion up to 6 months moving that high as well. Yield curve shape could be seeing an end to the double hump as the 10 year could see 4.5% soon, creating a plateau at the terminal rates. Higher rate environment is definitely affecting the housing market with existing home sales moving lower last week, then new home sales also expected to lower with the monthly indication declining to -15.3% from 28.8% in September.

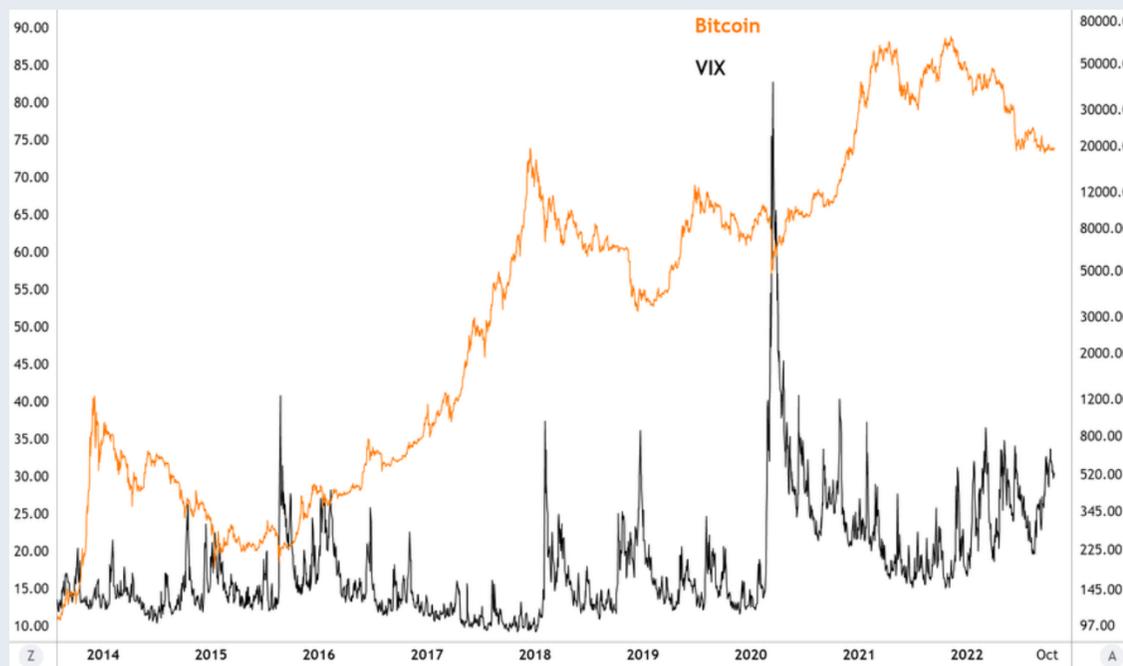
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Indices	Ticker	Price (\$)	Returns (%)				
			1 week	1 month	3 month	YTD	1 year
S&P 500	SPX	3752	4.74	1.61	-5.27	-21.26	-17.43
Nasdaq 100	NDX	11310	5.78	-0.01	-8.76	-30.70	-26.34
Russell 2000	RUT	1742	3.56	3.73	-3.58	-22.41	-23.96
Dow Jones Ind.	DJI	31082	4.89	5.04	-2.56	-14.46	-12.88
Commodities							
Crude Oil	CL1	83.82	-2.17	9.80	-13.09	11.09	0.13
Brent Crude	BRN00	90.22	-1.92	9.05	-9.73	15.77	5.99
Natural Gas	NG00	4.95	-17.20	-29.54	-42.60	38.65	-16.66
Unleaded Gas	RB00	2.45	-5.77	7.16	-21.15	10.53	0.20
Gold	GCO0	1651.80	-0.22	1.38	-3.85	-9.75	-8.67
Silver	SI00	19.15	2.98	4.44	4.50	-17.96	-22.27
Copper	HG00	3.43	0.81	4.30	2.03	-22.97	-24.16
Corn	CO0	679.25	-0.51	1.99	16.66	14.64	26.25
Wheat	W00	842.00	-1.98	-1.81	9.42	9.32	10.72
Bloomberg Commodity Index	BCOM	111.39	-2.00	-0.90	-4.41	12.30	7.34
Bitcoin	BTC	19331.65	-1.73	-1.00	-9.76	-58.38	-68.63



Source: TradingView

News Review

- [Walmart CTO: Crypto Will Become a 'Major' Payments Disruptor for Customer Transactions](#)
- [Fireblocks Expands Digital Asset Payments Engine Product After Settling \\$1 billion for Checkout.com](#)
- [Israel Kicks Off Live Tests for its Tokenized Digital Bonds on Blockchain Platform](#)
- [Foreign Exchange Company Oanda Launches Mobile Crypto Offering in US](#)
- [US FDIC Chief: Stablecoins Could 'Fundamentally Alter' Banking System](#)
- [Native USDC on Cosmos to Fill Vacuum Left by Terra's UST Stablecoin](#)
- [Hong Kong Unveils Completed Retail CBDC Project that has a CBDC-Backed Stablecoin](#)
- [Crypto Bank Silvergate to Miss Goal of Offering Stablecoin This Year](#)
- [Online Bank N26 to Offer Crypto Through Bitpanda's Trading Product](#)
- [Polkadot Synthetic Asset Protocol Tapio Raises \\$4 Million from Polychain and Others](#)
- [Warner Bros. to Sell 'Lord of the Rings: The Fellowship of the Ring' in Limited-Edition NFT Bundles](#)
- [Forget Ape And Punk NFTs, An Actual House Sold On OpenSea For \\$175,000](#)
- [Customers of Bankrupt Crypto Lender Voyager Could Recover 72% of Their Funds if FTX Sale Is Approved](#)
- [IRS Expands Key US Tax Language to Include NFTs](#)

Key Takeaways

- Price correlations between Bitcoin and Gold have sharply risen in recent weeks
- On-chain Bitcoin data suggests a long term mindset of remaining investors
- Absent Bitcoin volatility continues to build towards a pending volatility spike

On-Chain Commentary

Another quiet week as the short term narrative has shifted away from lamenting the lack of volatility in digital assets to embracing the rising correlation of Bitcoin to Gold. Bitcoin's correlations to many sectors have waxed and waned over the past 10 years, with the correlation to US equities rising significantly since March 2020. A rising Bitcoin to Gold correlation over the past few weeks does hint at the possibility for strengthening of the safe haven investor mentality towards Bitcoin. This potentially suggests the remaining market participants are not the risk-on traders from 2021, but rather longer term investors. On-chain evidence also shows a record 66% of coins have not moved in the past year.

Technicals for Bitcoin continue to show a significant contraction in price volatility over the past few months. Weekly Bollinger Bands, which currently show the 6th tightest volatility squeeze in Bitcoin's history, help quantify the dramatic decline in volatility. Price bias leans bearish, with continued weekly closes below the neutral 20-week moving average (MA), now at \$20,070. A Bollinger Band breakout and resulting volatility expansion could lead to a downside price level of \$10,000 to \$13,500, the lower bounds of which would mark a -85% drawdown from the all-time high. Both the 2014 and 2018 bear markets found eventual bottoms within similar ranges. Alternatively, a move higher will be foreshadowed first by a price rise above the 20-week MA before the Bollinger Band breakout.

Bitcoin Fear and Greed Index

Multifactorial Market Sentiment Analysis



Last Week: 20 Last Month: 24

Source: Alternative.me

Bitcoin Monthly Average Hashrate

300EH/s



Source: CoinMetrics

Crypto	Ticker	Price (\$)	Returns (%)					Annualized				
			1 week	1 month	3 month	YTD	1 year	M Cap (bn)	Issuance (%)	Stake Yield (%)	Volatility	Sharpe
Bitcoin	BTC	19331.65	-1.73	-1.00	-9.76	-58.38	-68.63	369.02	1.75	N/A	0.64	-1.47
Ethereum	ETH	1341.58	-2.52	0.06	-7.69	-63.82	-68.10	162.73	0.54	4.81	0.84	-0.91
Binance Coin	BNB	273.63	-1.45	-4.49	11.48	-46.86	-43.98	43.51	0.00	3.75	0.73	-0.48
Solana	SOL	28.66	-3.31	-14.87	-22.77	-83.35	-85.69	10.14	2.80	3.22	1.05	-1.34
Polygon	MATIC	0.89	-2.11	13.11	14.58	-65.18	-46.36	7.69	3.18	6.99	1.18	0.08
Polkadot	DOT	5.87	-2.29	-7.82	-13.73	-78.14	-86.74	6.58	8.06	14.01	0.98	-1.54
Tron	TRX	0.06	-0.69	0.31	-3.07	-18.59	-38.95	5.66	2.03	3.59	0.73	-0.26
Avalanche	AVAX	15.96	-3.51	-8.53	-24.61	-85.64	-75.96	4.68	5.90	8.40	1.17	-0.59
Cosmos	ATOM	11.80	-3.95	-10.64	29.93	-64.12	-67.41	3.33	13.01	18.90	1.20	-0.26
Near	NEAR	2.93	-2.75	-18.54	-23.19	-80.31	-69.42	2.36	6.19	10.50	1.35	-0.23
Algorand	ALGO	0.31	-2.73	-13.16	-1.35	-81.51	-83.92	2.17	4.06	6.67	0.95	-1.40
Fantom	FTM	0.21	-2.39	-9.33	-32.68	-90.93	-92.01	0.52	3.07	6.40	1.37	-1.11
Zilliqa	ZIL	0.03	-2.97	-8.47	-22.46	-61.50	-72.33	0.39	4.84	11.92	1.67	-0.13

Bitcoin 30-Day Rolling Volatility



Source: CoinMetrics

Bitcoin Moving Averages



Source: TradingView

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Past performance is not indicative of future results. Investments may be speculative, illiquid and there is a risk of total loss. There is no guarantee that any specific outcome will be achieved.

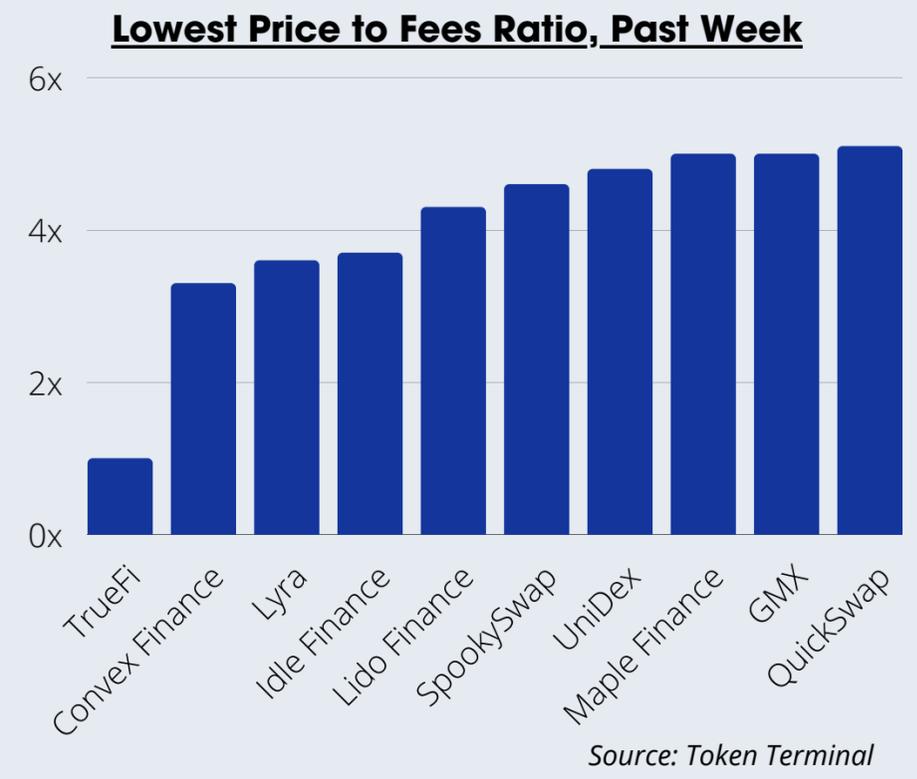
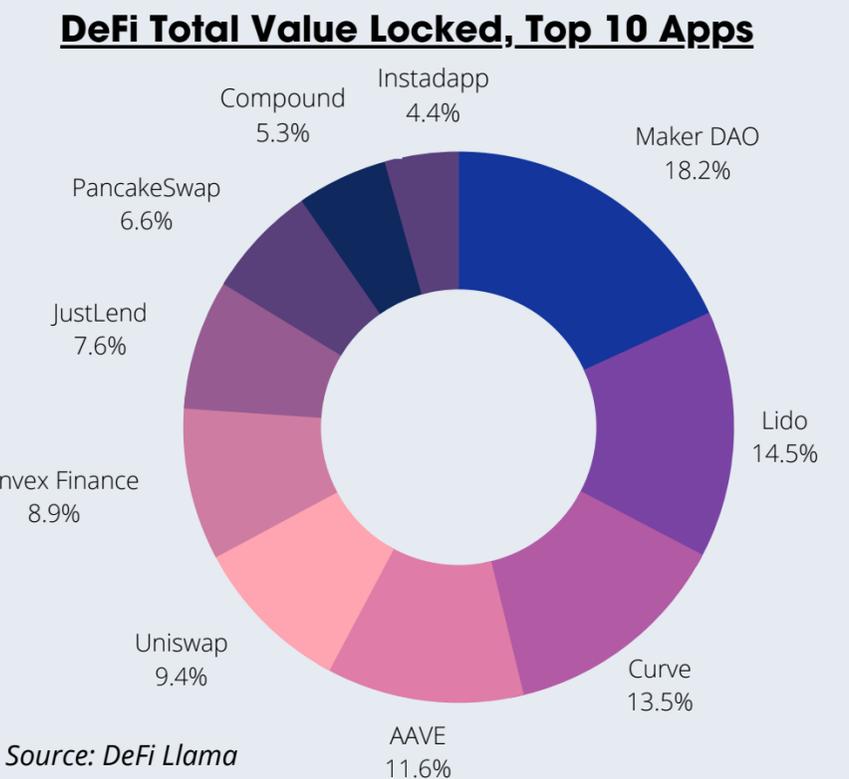
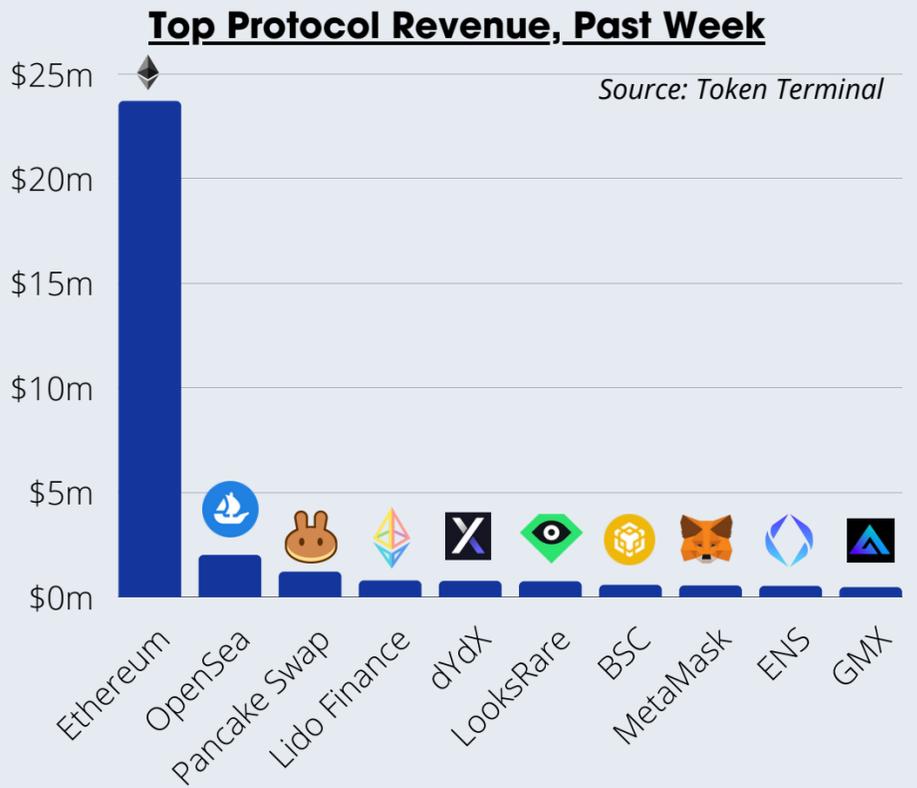
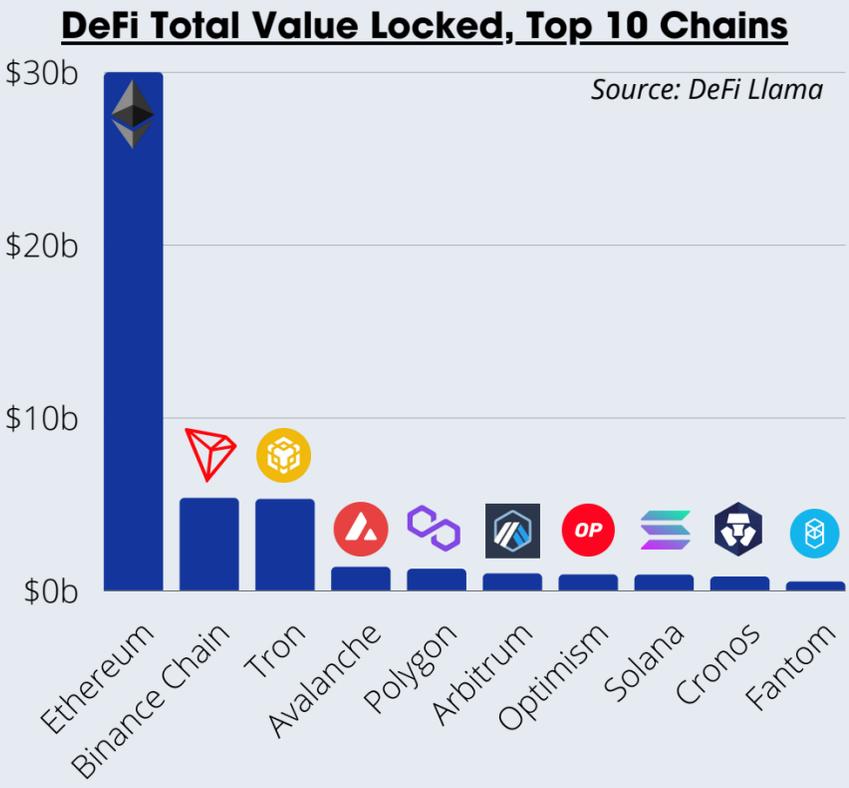
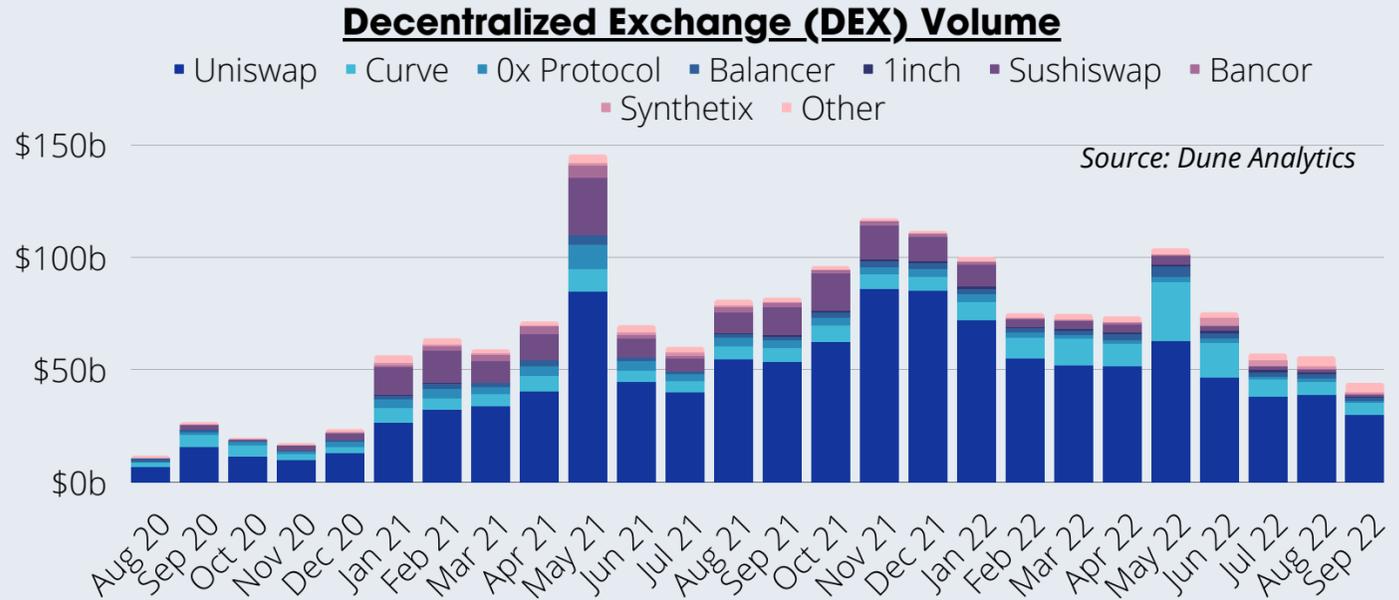
Key Takeaways

- The base layer for DeFi applications, Layer 1 blockchains, continue to be released
- Like many who have come before it, Aptos promises to be a better version of Ethereum
- DeFi borrowing and lending applications continue to grow with the introduction of Ribbon Lend

Decentralized Finance (DeFi) Commentary

A flurry of Layer 1 blockchains have been released over the past few years, all with the promise of gathering applications and users. Layer 1 blockchains allow developers to build DeFi protocols on top of the chain's infrastructure. Another has entered the arena, Aptos, which promises to be better than all those who have come before it. The Aptos network, which is billed as a Proof of Stake rival to both Ethereum and Solana, uses a programming language originally created for Diem, Meta's abandoned crypto project. A few weeks ago, the project airdropped 20 million Aptos (APT) tokens to early adopters of the network, worth roughly \$194.6 million. The chain currently has \$15.5 million in TVL on seven applications according to DeFiLlama. Despite only freshly launching, with minimal on-chain activity, the coin is already trading at several centralized exchanges.

On the applications front, Ribbon Finance, a decentralized structured product protocol, recently launched Ribbon Lend, which offers unsecured lending products. Ribbon Finance, with just under \$92 million in TVL, is accessible through Ethereum, Avalanche and Solana. The protocol has seen roughly \$45 million in user deposits which have been borrowed by Alameda backed Folkvang Trading and Wintermute. Ribbon's launch of Lend puts them in direct competition with Maple Finance, Clearpool, and TrueFi as on-chain unsecured lending heats up. Maple Finance has issued over \$1.8 billion in loans since 2019. According to Folkvang's CIO Jeff Anderson, "borrowing through Ribbon is more capital efficient".



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Stablecoin Origins & Purpose

Stablecoins are a sector of cryptocurrencies which attempt to peg value to \$1, typically using an external reference, such as USD or EUR. The main types of stablecoins include; fiat-backed, crypto-backed, algorithmic, or hybrid collateralization.

Tether (USDT) was initially created in 2014 to act as a potential hedge against market volatility, as well as increasing the transferability and convertibility of fiat currencies to cryptocurrencies. Tether's usage and supply grew substantially throughout the 2017 Bitcoin bull run, which significantly increased adoption of USDT trading pairs on crypto exchanges. As scrutiny increased over Tether's reserves, competing projects like Circle's USD Coin (USDC) arose with a focus on increased transparency. Today, most fiat-backed stablecoins, including Tether, release monthly reserve attestations.

Fiat-Backed

The two largest stablecoins by circulating supply, USDT and USDC, are both backed by USD reserves and/or USD equivalents held in third-party financial institutions. Issuing these types of stablecoins directly from the servicer also requires KYC/AML compliance and minimum capital requirements.

Crypto-Backed

Crypto-collateralized stablecoins require on-chain management with the use of smart contracts, which also allows for 100% transparency of reserves and collateralization levels. Most crypto-backed stablecoins do not have KYC/AML or minimum capital requirements for initialization but do require overcollateralization of loans to buffer against market volatility. If these loans fall below the required collateralization level, they are liquidated.

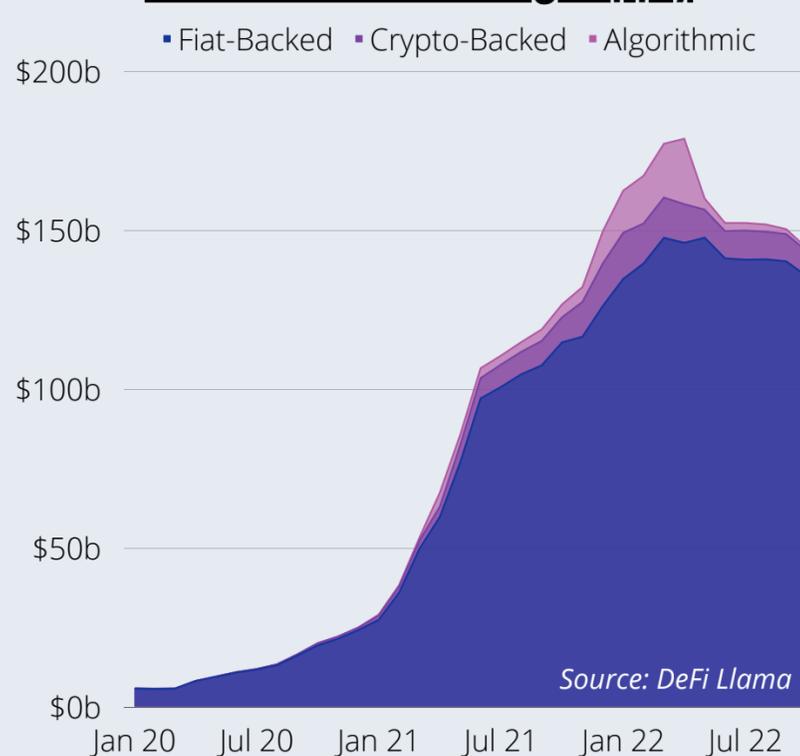
Algorithmic

Of all stablecoin types, algorithmic or seigniorage-style stablecoins have had the most difficulty maintaining a \$1 peg, historically. This stablecoin type does not require collateral and are managed on-chain via smart contracts. Algorithmic stablecoins *will* increase or decrease the circulating supply to maintain stablecoin value.

Tether Redemptions & Reserves

Tether experienced about \$19 billion in redemptions, approximately 20% from the peak, since the Terra and UST algorithmic stablecoin implosion in mid-May. Earlier this year, Tether saw increasing scrutiny regarding the components of its reserve holdings, including a nearly 25% slice of commercial paper. Going forward, Tether will be replacing the MHA Cayman accounting firm with BDO Italia and will publish monthly attestations of stablecoin reserves. According to the latest attestation of reserves, commercial paper holdings have declined to 12% of the total reserves. Tether has said they plan to reduce these holdings to zero by the end of the year, as well as plans for a full audit through BDO Italia. As of September 30th, the Tether reserves now hold 58% US Treasury Bills, per Paolo Ardoino, Tether's CTO.

Stablecoin Circulating Supply



Stablecoin Net Exchange Flow



Fiat-Backed	Ticker	Supply (\$, bn)	Launch	Chain	
	Tether	USDT	68.46	Sept '14	Multi
	Circle	USDC	43.25	Sept '18	Multi
	Binance	BUSD	21.77	Sept '19	Multi
	Paxos	USDP	0.89	Sept '18	ETH, BSC
	TrueUSD	TUSD	0.88	Jan '18	Multi
	Gemini	GUSD	0.33	Sept '18	ETH
	Huobi	HUSD	0.21	Nov '18	ETH, SOL

Crypto-Backed

	MakerDAO	DAI	5.79	Dec '17	Multi
	Abracadabra	MIM	1.81	May '21	Multi
	Liquity	LUSD	0.18	Apr '21	ETH
	Synthetix	sUSD	0.13	Dec '18	ETH, FTM
	mStable	mUSD	0.05	May '20	ETH

Algorithmic

	Frax	FRAX	1.36	Dec '20	Multi
	Neutrino	USDN	0.11	Oct '19	Multi
	Fei USD	FEI	0.06	Dec '20	ETH
	TerraUSD	UST	0.00*	Sept '20	Multi



Weekly Market Review - October 24th, 2022

On-Chain Commentary, Decentralized Finance (DeFi) Commentary, Traditional Market Commentary: Source: Valkyrie Investments, Inc.

Coin Prices, Market Capitalizations, and Returns: Source: Valkyrie Investments, Inc., TradingView, Messari. All returns represent total return for stated period. Coin Logos: Source: cryptologos.cc

Annualized Issuance, Staking Yield, Volatility, and Sharpe Ratio: Source: Valkyrie Investments, Inc., Messari, StakingRewards.com. ETH staking rewards values are representative of the network post-Proof-of-Stake transition.

Bitcoin Fear and Greed Index Source: Valkyrie Investments, Inc., alternative.me and represents a multifactorial sentiment analysis index of volatility, market momentum and volume, social media, bitcoin market cap dominance, and Google trends

Bitcoin Monthly Average Hashrate, Bitcoin 30-Day Rolling Volatility: Source: Valkyrie Investments, Inc., CoinMetrics

Bitcoin Weekly Moving Averages: Source: Valkyrie Investments, Inc., TradingView - INDEX:BTCUSD

Stablecoin Origins & Purpose, Fiat-Backed, Crypto-Backed, Algorithmic, Tether Redemptions & Reserves: Valkyrie Investments, Inc., Tether Operations, CoinMetrics, Circle, and Paxos

Stablecoin Circulating Supply: Source: Valkyrie Investments, DeFi Llama - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Stablecoin Net Exchange Flow: Source: Valkyrie Investments, Inc., Nansen and represent wallet inflows and outflows of Tether, USD Coin, Binance USD, PAX, and Huobi USD through crypto exchanges, including but not limited to; Binance, Curve.fi, AnySwap, Crypto.com, Uniswap, Hop Protocol, OKEx, Kucoin, dYdX, Coinbase, Kraken, Huobi, FTX, Gemini, FTX US, CoinList, SushiSwap, Gate.io, Balancer, BitMEX, Bitfinex, Bittrex, Binance US, Bitstamp, BlockFi, Paxos, Celsius, Alameda OTC, Poloniex, HitBTC, Bancor, Kyber, and ShibaSwap.

List and examples shown in the Stablecoin table are non-exhaustive, intended for illustrative purposes only. Chain data sourced from CoinMarketCap. "Multi" description can include Ethereum, Solana, Binance Smart Chain, Algorand, Tron, Fantom, Polygon, Avalanche, Arbitrum, Secret, Terra, Moonriver, Velas, and Harmony. Coin Logos: Source: cryptologos.cc

DeFi Total Value Locked, Top 10 Chains, DeFi Total Value Locked: Source: Valkyrie Investments, DeFi Llama - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Top Protocol Revenue, Past Week, Lowest Price to Fees Ratio, Past Week: Source: Valkyrie Investments, Token Terminal - list and examples shown are non-exhaustive, intended for illustrative purposes only.

Decentralized Exchange (DEX) Volume: Source: Valkyrie Investments, Dune Analytics - Defined as total reported volume for the specified DEX in the specified time period. "Other" category includes the following DEXs: airswap, Bancor Network, clipper, DDEX, DefiPlaza, DFX Finance, DODO, dYdX, Gnosis Protocol, IDEX, Indexed Finance, Kyber, LINKSWAP, Loopring, mStable, Oasis, PowerIndex, Shell, xSigma

"Indicies" prices and returns: Source: Valkyrie Investments, Inc., MarketWatch. "S&P 500" provided by Standard & Poor's and is a stock market index tracking the performance of 500 large companies listed on stock exchanges in the United States, "Nasdaq 100" provided by NASDAQ OMX Group and includes 100 of the largest domestic and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization. "Russell 2000" provided by FTSE Russell and is a small-cap stock market index that makes up the smallest 2,000 stocks in the Russell 3000 Index. "Dow Jones Ind." provided by S&P Dow Jones Indices and is a price-weighted measurement stock market index of 30 prominent companies listed on stock exchanges in the United States. "Gold" provided by NYMEX - CME Group and is a continuous futures product. All returns represent total return for stated period.

"Commodities" prices and returns: Source: Valkyrie Investments, Inc., Wall Street Journal. Bloomberg Commodity Index provided by Bloomberg and tracks prices of futures contracts on physical commodities on the commodity markets. All returns represent total return for stated period.

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